

## Claims

1. A method for call setup, the method comprising the steps of:
  - receiving a call-setup request from a mobile unit;
  - 5 determining RF conditions from the call setup request;
  - determining whether to utilize either a Base Station Controller (BSC) or a base station for channel assignment based on the RF conditions; and
  - assigning a channel to the mobile unit.
- 10 2. The method of claim 1 further comprising the step of:
  - determining a type of call to be setup; and
  - wherein the determination on whether to utilize the BSC or the base station for channel assignment is additionally based on the type of call to be setup.
- 15 3. The method of claim 1 wherein the step of determining RF conditions comprises the step of determining RF conditions from RF conditions reported in the call-setup request.
4. The method of claim 1 wherein the step of determining RF conditions comprises
  - 20 the step of determining a number of base stations available for communication.
5. The method of claim 1 further comprising the step of:
  - determining if the call setup request is for a Push-to-Talk (PTT) call; and
  - wherein the determination on whether to utilize the BSC or the base station
  - 25 for channel assignment is additionally based on if the call setup request is for a PTT call.
6. The method of claim 1 wherein the step of receiving the call-setup request comprises the step of receiving one of an IS2000 Origination Message, an IS2000
  - 30 Page Response Message, or an IS2000 Reconnect Message.

7. The method of claim 1 wherein the step of determining RF conditions from the call setup request comprises the step of determining a number of base stations capable of communicating with the mobile unit; and

5 wherein the step of determining whether to utilize either the Base Station Controller (BSC) or the base station for channel assignment comprises the step of utilizing the base station for channel assignment when only a single base station is capable of communicating with the mobile unit.

8. The method of claim 1 wherein the step of assigning the channel to the mobile unit  
10 comprises the step of assigning the channel from a pool of reserved channels utilized by the base station.

9. A method comprising the steps of:

15 receiving a request from a mobile unit to set up a call;  
receiving RF conditions from the request;  
receiving a type of call to be set up from the request;  
determining whether to utilize either a BSC or a base station for channel assignment based on the RF conditions and the type of call to be set up; and  
20 assigning a channel to the mobile unit via either the BSC or the base station based on the determination.

10. The method of claim 9 wherein the step of receiving RF conditions comprises the step of receiving a number of base stations available for communication.

25 11. The method of claim 9 wherein the step of receiving the type of call to be set up comprises the step of receiving a request to set up a PTT call.

12. The method of claim 9 wherein the step of receiving the type of call to be set up comprises the step of receiving a request to set up a standard interconnect call.  
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13. The method of claim 9 wherein the step of receiving the request comprises the step of receiving one of an IS2000 Origination Message, an IS2000 Page Response Message, or an IS2000 Reconnect Message.

- 5 14. The method of claim 9 wherein the step of receiving RF conditions from the request comprises the step of determining a number of base stations capable of communicating with the mobile unit; and

wherein the step of determining whether to utilize either the BSC or the base station for channel assignment comprises the step of utilizing the base station for  
10 channel assignment when only a single base station is capable of communicating with the mobile unit.

- 15 15. The method of claim 9 wherein the step of determining whether to utilize either the BSC or the base station for channel assignment comprises the step of determining whether to utilize either the BSC or the base station for channel assignment based on  
the RF conditions and whether or not the call to be set up is a PTT call.

16. An apparatus comprising:  
means for receiving a request from a mobile unit to set up a call;  
20 means for receiving RF conditions from the request;  
means for receiving a type of call to be set up from the request;  
means for determining whether to utilize either a BSC or a base station for channel assignment based on the RF conditions and the type of call to be set up; and  
means for assigning a channel to the mobile unit via either the BSC or the  
25 base station based on the determination.

17. The apparatus of claim 16 wherein the means for receiving RF conditions comprises means for receiving a number of base stations available for communication.

- 30 18. The apparatus of claim 16 wherein the means for receiving the type of call to be set up comprises means for receiving a request to set up a PTT call.

19. The apparatus of claim 16 wherein the means for receiving the type of call to be set up comprises means for receiving a request to set up a standard interconnect call.
- 5 20. The apparatus of claim 16 wherein the means for receiving the request comprises means for receiving one of an IS2000 Origination Message, an IS2000 Page Response Message, or an IS2000 Reconnect Message.